

Fact sheet

Danfoss Hansen® Universal Quick Disconnect (UQD)

One partner, every solution



Danfoss Hansen UQD is designed for thermal management applications, available in 4 sizes and has 2 color options. It complies with OCP (Open Compute Project) and exceeds requirements of specified performance characteristics. Danfoss UQD offers color identification (red and blue) and guarantees 100% helium-leak testing.

Product Features

- Designed per OCP (Open Compute Project) UQD specification
- Push-to-connect design
- High flow and no spillage
- Double shut off - flat face valves
- Exceeds OCP flow ratings at least by 25% resulting in reduction in overall energy consumption
- Best in class force to connect
- Standard material: 303 stainless steel provides broad fluid compatibility
- Standard seal material: EPDM
- Color anodized aluminum sleeves
- Color coded (red/blue) sleeves on socket and O-rings on plug
- Compact socket versions for sizes -02, -04, -06 to better fit in data center applications
- Wide range of terminal end options: ORB, BSPP on plug and push on hose on socket. Additional configurations available upon request
- Operating temperature -40°C to +150°C
- Typical working pressure: 6.9 bar, up to 20 bar for smaller sizes
- QR code identification to help track parts

Solutions to your **liquid cooling challenges**

Inner Rack Solutions

Danfoss' direct-to-chip cooling solutions extend into the racks through efficient routing of flexible, kink-free hoses, and leak free, helium-tested couplings.

Danfoss has a **comprehensive portfolio of premium fluid conveyance products** to meet your thermal management system needs.



UQD
Universal quick disconnect coupling

Designed for high flow rate and no spillage, the UQD coupling is perfect for in-rack applications with smaller hose lines.



Fact sheet | Danfoss Universal Quick Disconnect (UQD)

Size	Body Size	Nominal Flow Diameter	Max operating pressure						Min burst pressure						Rated Flow		Cv Value	Air Inclusion	Fluid Loss
			Connected		Socket / Female Half		Plug / Male Half		Connected		Socket / Female Half		Plug / Male Half						
	(in)	(mm)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(bar)	(psi)	(lpm)	(gpm)	-	cc. max.	cc. max.
UQD02	1/8	2.8	20	290	20	290	20	290	60	870	60	870	60	870	2.1	0.6	0.33	0.004	0.007
UQD04	1/4	5.5	16	232	16	232	16	232	48	696	48	696	48	696	6.4	1.7	1.37	0.024	0.01
UQD06	3/8	6.3	6.9	100	6.9	100	6.9	100	20.7	300	20.7	300	20.7	300	11.4	3.0	2.37	0.027	0.022
UQD08	1/2	8.9	6.9	100	6.9	100	6.9	100	20.7	300	20.7	300	20.7	300	17.8	4.7	5.32	0.029	0.03

Size	Performance Parameters					
	Force to Connect		Recommended Torque			
	N	lb	ORB size	N-m	BSP Size	N-m
UQD02	48	10.79	7/16-20	11-12	1/8"	8-9
UQD04	50	11.24	9/16-18	18-20	3/8"	18-20
UQD06	73	16.41	3/4-16	52-57	3/8"	18-20
UQD08	87	19.56	7/8-14	58-64	1/2"	34-37

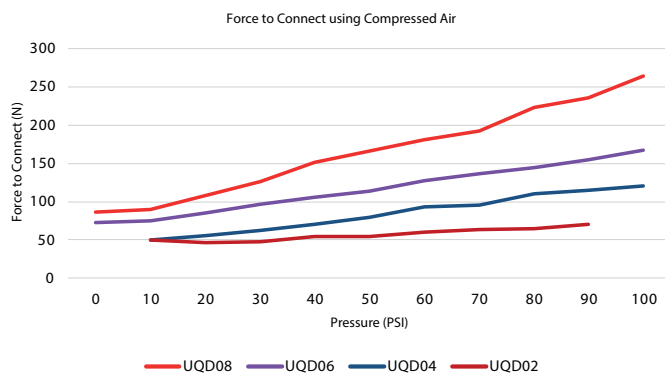
Applications & Markets

- Liquid cooling application
- Data center application

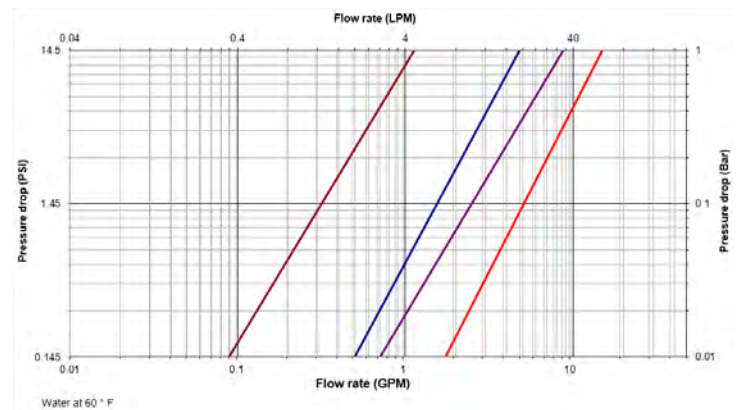
Seal Elastomer Data

Seal Elastomer	P/N Code	Operation Temperature Range	
		C°	F°
EPDM	-	-40°C +150°C	-40°F +302°F

Force to Connect Vs Pressure



Flow Data



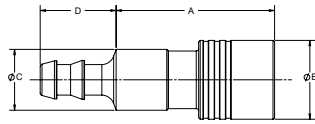


Figure 1
Push on socketless fitting

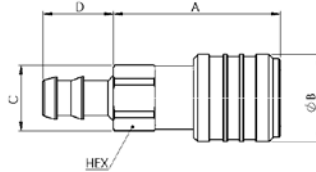


Figure 2
Push on socketless fitting

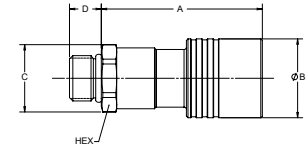


Figure 3
Male ORB

Socket (Female) part

UQD	Part number	Order number	Details			Dimensions									
			Thread / end size		Fig.	A		B		C		D		Hex	
			Hose Tail	ORB		(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
UQD02	2UQS25HABLS11	2UQS25HABLS11	1/4	-	1	38.4	1.51	18.5	0.73	8.7	0.34	19.6	0.77	-	-
	2UQS25HARDS11	2UQS25HARDS11													
	4UQS37HABLS11	4UQS37HABLS11	3/8	-	1	49.5	1.95	24.6	0.97	9	0.36	23.7	0.93	-	-
	4UQS37HARDS11	4UQS37HARDS11													
UQD04	4UQS25HABLS11	4UQS25HABLS11	1/4	-	1	51.2	2.01	24.6	0.97	11.9	0.47	22	0.87	-	-
	4UQS25HARDS11	4UQS25HARDS11													
	4UQS56ORMBLS11	4UQS56ORMBLS11	-	9/16	3	50.3	1.98	24.6	0.97	21	0.83	9.9	0.39	19	0.75
	4UQS56ORMRDS11	4UQS56ORMRDS11													
UQD06	6UQS50HABLS11	6UQS50HABLS11	1/2	-	1	52.3	2.05	27.9	1.09	23	0.9	25.8	1.01	-	-
	6UQS50HARDS11	6UQS50HARDS11													
	6UQS75ORMBLS11	11348377	-	3/4	3	52.5	2.06	27.9	1.09	22	0.87	11.1	0.44	22	0.86
	6UQS75ORMRDS11	11348376													
UQD08	8UQS62HABL	8UQS62HABL	5/8	-	2	68.4	2.69	35	1.38	30	1.18	39	1.54	27	1.06
	8UQS62HARD	8UQS62HARD													

Note 1: To obtain connected length of coupling, add dimensions A (Fig. 1) and G (Fig. 2) together.

Note 2: For color options, RD suffix corresponds to RED and BL suffix to BLUE

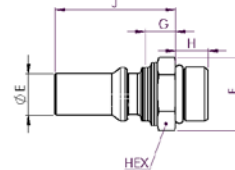


Figure 4
Male ORB ISO 11926-3

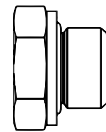


Figure 5
ISO 1179-3

Plug (Male) part

UQD	Part number	Order number	Details			Dimensions											
			Thread / end size	Fig.		E		F		G		H		J		Hex	
						BSP	ORB	n°	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)
UQD02	2UQP43ORMBL	2UQP43ORMBL	-	7/16-20	4	6.65	0.26	16.17	0.64	8.7	0.34	9.1	0.36	29.3	1.15	14	0.55
	2UQP43ORMRD	2UQP43ORMRD															
	2UQP12MBSBL	2UQP12MBSBL	1/8	-	5	6.65	0.26	17.32	0.68	8.7	0.34	8	0.31	30.4	1.20	15	0.59
	2UQP12MBSRD	2UQP12MBSRD															
UQD04	4UQP56ORMBL	4UQP56ORMBL	-	9/16-18	4	11.07	0.44	19.63	0.77	9.8	0.39	9.9	0.39	37.9	1.49	17	0.67
	4UQP56ORMRD	4UQP56ORMRD															
	4UQP37MBSBL	4UQP37MBSBL	3/8	-	5	11.07	0.44	25.40	1.00	9.8	0.39	11.2	0.44	37.9	1.49	22	0.87
	4UQP37MBSRD	4UQP37MBSRD															
UQD06	6UQP75ORMBL	6UQP75ORMBL	-	3/4-16	4	14.3	0.56	25.40	1.00	10	0.39	11.1	0.44	41.6	1.64	22	0.87
	6UQP75ORMRD	6UQP75ORMRD															
	6UQP37MBSBL	6UQP37MBSBL	3/8	-	5	14.3	0.56	25.40	1.00	10	0.39	11.2	0.44	41.6	1.64	22	0.87
	6UQP37MBSRD	6UQP37MBSRD															
UQD08	8UQP87ORMBL	8UQP87ORMBL	-	7/8-14	4	17.48	0.69	31.18	1.23	12	0.47	12.7	0.50	47.6	1.87	27	1.06
	8UQP87ORMRD	8UQP87ORMRD															
	8UQP50MBSBL	8UQP50MBSBL	1/2	-	5	17.48	0.69	34.64	1.36	12	0.47	14.5	0.57	47.6	1.87	30	1.18
	8UQP50MBSRD	8UQP50MBSRD															

Note 1: To obtain connected length of coupling, add dimensions A (Fig. 1) and G (Fig. 2) together.

Note 2: For color options, RD suffix corresponds to RED and BL suffix to BLUE

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